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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/519,387  | 12/27/2004  | Zeev Maor            | 1268-170U           | 6945             |
| 23429 7590 12/19/2007<br>LOWE HAUPTMAN HAM & BERNER, LLP<br>1700 DIAGONAL ROAD<br>SUITE 300<br>ALEXANDRIA, VA 22314 |             |                      |                     |                  |
| EXAMINER  |             |                      |                     |                  |
| FRAZIER, BARBARA S  |             |                      |                     |                  |
| ART UNIT  |             | PAPER NUMBER         |                     |                  |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/519,387

**Applicant(s)**

MAOR ET AL.

**Examiner**

BARBARA FRAZIER

**Art Unit**

4173

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 2, 4, 13 and 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3 and 5-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/S5108)  
Paper No(s)/Mail Date 9/21/05
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election without traverse of the specie of a) strontium hexaferrite as the magnetic particle, b) emulsion as the form of the composition, and c) vegetable extract as the additive present, in the reply filed on 11/20/07 is acknowledged.
2. Claims 2, 4, 13, and 14 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 11/20/07.
3. Claims 1, 3, and 5-12 are examined.
4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

### ***Information Disclosure Statement***

5. The information disclosure statement filed 9/21/05 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language (specifically,

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for Swiss patent 313679). It has been placed in the application file, but the information referred to therein has not been considered.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 1, 3, 5-8, 10, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zastrow et al., US Patent 5,961,988.

The claimed invention is drawn to a composition comprising small magnetic particles which have a magnetic field and which are configured to be topically administrated on skin (see claim 1). According to Applicant's specie election, the composition comprises strontium hexaferrite in the form of an emulsion, with the presence of a vegetable extract.

Zastrow '988 disclose a dermatological preparation containing magnetically hard particles such as strontium hexaferrite (col. 1, lines 37-39) which may be used in an emulsion (for example, see col. 3, lines 23-24, Example 1C), and Example 2). The composition may also contain a vegetable extract such as Babassu oil (see col. 3, lines 22-23 and Example 2). Zastrow '988 differ from the claimed invention because the specific combination of strontium hexaferrite, emulsion, and vegetable extract is not disclosed. However, the limited number of choices (four) for magnetic particles would provide sufficient motivation for one skilled in the art to choose strontium hexaferrite as the magnetic particle. Furthermore, since emulsions and a vegetable extract are exemplified in the examples, one skilled in the art would have been motivated to make the dermatological preparations in the form of an emulsion with a vegetable extract. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to form a composition comprising strontium hexaferrite in the form of an emulsion with a vegetable extract, with a reasonable expectation of success.

Regarding the forms listed in claim 6, it is noted that the emulsions may be present as a hair mask or dermatological ointment (see Examples 3 and 4).

Regarding claim 7, Zastrow '988 disclose that an emulsion base is added to the magnetically hard particles (see Example 1C, col. 5, lines 15-18). Based on this description, one skilled in the art would recognize that the magnetic particles would be solubilized, dispersed or suspended in the emulsion.

Regarding the limitation of the magnetic particles being nano-magnetic particles (claims 10 and 12), Zastrow '988 teach that the magnetic particles have a particle size in the range of 80 to 550 nm. This would, therefore, classify them as "nano-magnetic particles". Furthermore, the size range cited in Zastrow '988 overlaps with the size range described in claim 12 of the claimed invention, and one skilled in the art would have been able to select the optimum size as a matter of routine experimentation.

10. Claims 1 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zastrow '988, US Patent 5,961,988 as applied to claims 1, 3, 5-8, 10, and 12 above, and further in view of Chittofrati et al., EP 0686447.

The claimed invention and the invention of Zastrow '988 are described above (see paragraph 11). Zastrow '988 differ from the claimed invention because the particle size range is 100 to 550 nm instead of 2 to 20 nm. However, Chittofrati et al. disclose a process for the preparation of mixed ultrafine particles having particle size lower than 50 nm, preferably lower than 10 nm. The particles may be magnetic ferrites containing barium (see abstract and page 4, lines 35-38). Chittofrati et al. also teach that, in the case of cosmetics, "the small size and the particles uniformity are favourable characteristics for the homogeneity of the formulations and for the dispersibility of the powder in the various liquids wherein it must be used under the form

of uniform dispersion” (page 2, lines 15-18). Furthermore, while Chittofrati et al. only disclose barium, they do teach that M1 having valence (II), which would include strontium, can be cited. Additionally, Zastrow ‘988 teach that barium hexaferrite and strontium hexaferrite are functional equivalents of each other, such that one could be substituted for the other. Therefore, it would have been obvious at the time the invention was made to use ultrafine magnetic particles made by the process of Chittofrati et al. in the dermatological preparations of Zastrow ‘988, with a reasonable expectation of success.

11. Claims 1, 3, and 5-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zastrow et al., US Patent 5,800,835.

The claimed invention is described above (see paragraph 11). Zastrow ‘835 disclose preparations for use in the dermatological field to be applied to the skin (col. 2, lines 27-28) containing magnetic particles (col. 1, lines 45-50) such as strontium hexaferrite (col. 1, lines 53-55) in the form of emulsions (for example, Examples 13 and 14). The compositions may preferably have rosmarinic acid or another virucidal or virustatic active ingredient occurring in plants (col. 5, lines 12-14). Zastrow ‘835 differ from the claimed invention because the specific combination of strontium hexaferrite, emulsion, and vegetable extract is not disclosed. However, since the plant extract of rosmarinic acid is specifically named and the combination of strontium hexaferrite in an emulsion is exemplified, it would have been prima facie obvious to a person having ordinary skill in the art to add rosmarinic acid to the emulsions of Examples 13 and 14, with a reasonable expectation of success.

Regarding claim 7, it is noted that, in Examples 13 and 14, the magnetic particles are added to the emulsions. Based on this information, one skilled in the art would recognize that the magnetic particles would be solubilized, dispersed, or suspended in the emulsions.

Regarding claim 9, it is noted that Example 14 has dimethicone, a polyalkylsiloxane, present in the emulsion. Based on this information, and absent any evidence to the contrary, one skilled in the art would recognize that the magnetic particles would be suspended in the polyalkylsiloxane.

Regarding claim 10, it is noted that the magnetically hard particles of Zastrow '835 are nano-magnetic particles (see col. 1, line 49).

#### ***Claim Objections***

12. Claim 1 is objected to because of the following informalities: the phrase “*inter alia*” is redundant, since the claim already contains the open-ended term “comprising”. It is suggested that Applicants delete this phrase from the claim.

13. Claim 6 is objected to because of the following informalities: the phrase “in the form selected at least one of the group selected from” appears to be unclear. It is suggested that Applicants reword the phrase in order to improve the clarity of the claim.

14. Claim 9 is objected to because of the following informalities: the term “polyallcyl siloxane” appears to be a typographical error. It is suggested Applicants amend the claim to read “polyalkylsiloxane”, as it appears on page 3 of the specification.



Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara Frazier whose telephone number is (571)270-3496. The examiner can normally be reached on Monday-Thursday 8am-4pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel can be reached on (571)272-0718, or Cecilia Tsang can be reached on (571)272-0562. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BSF

/Ardin Marschel/  
Supervisory Patent Examiner, Art Unit 1614